

ral appearance is that of a small *Gobio* or a *Hybognathus*, with the muzzle rather heavier than is usual in either; but examination shows that, besides the absence of barbels, it is peculiar in that the suborbital and interopercular bones, with the rami of the mandible, are greatly dilated, and bear septary laminæ, which separate mucous cavities, relatively as large as those of *Acerina* or *Percopsis*. They extend in two series; seven from the postorbital bone to the side of the end of the muzzle, and eight from the same point to the symphysis mandibuli. The muzzle overlaps the mandible; no cartilage on the latter. Scales large, the usual surface exposed. Anal short, originating opposite end of depressed dorsal. Origin of ventrals opposite first dorsal ray. Pharyngeal bones slender; teeth acutely uncinate-raptatory, without masticatory surface, 4·1—0·4.

I am not aware that any genus of Cyprinidæ is known to exist in America or the old world, which possesses the cavernous structure above mentioned. Traces of it may be observed on the interoperculum in certain genera, e. g., *Hypsilepis*.

The suboperculum is small; operculum height to breadth as one and one-half to one. Head broad, muzzle obtusely rounded. Canthus of mouth opposite nares. Length of head contained three and five-sixths times to origin of caudal; greatest depth (at dorsal) nearly five times in the same. Caudal peduncle elongate, not constricted. Eye large, contained a little more than three times in length of head, a little more than frontal width. Origin of dorsal a little in advance of the point midway between end of muzzle and origin of caudal, its anterior ray equals half the distance from its base to anterior nostril. Caudal furcate one-half its length. Ventrals barely reaching vent; pectorals attaining ventrals. Scales $\frac{5}{3}$ 33; exposed portion with very numerous and delicate radii and concentric lines, not visible to the naked eye. A narrow space from vent to opposite middle of pectorals scaleless. Fins, DI. 8. C.+17+. A. I. 8. V. 8. P. 12. Lateral line nearly straight. Along and above it is a lateral band of brown punctulations; general color above yellowish olive, the edges of the scales dark-shaded, and a narrow brown vertebral line from nape to tail. Below lateral line silvery. Dorsal and caudal fins rosy. Length from muzzle to opercular edge 7 1.; to dorsal fin 13 1.; to end of appressed anal 1 in. 9 1.; to origin of caudal 2 in. 2 1.; to end of caudal 2 in. 8 1.

This species appears not to have come under the notice of Prof. Kirtland or of Rafinesque. It may be called *Ericymba buccata*.

Descriptions of Eight new species of *UNIO* of the United States.

BY ISAAC LEA.

UNIO DOLARIUS.—Testâ lœvi, ellipticâ, valdè inflatâ, inæquilaterali, posticè obtusè angulatâ, anticè rotundatâ; valvulis subtenuibus, anticè crassioribus; natibus prominentibus, valdè inflatus; epidermide virido-luteâ, radiis undique indutis; dentibus cardinalibus erectis, acuminatis, compresso-conicis crenulatisque; lateralibus sublongis, curvatis corrugatisque; margaritâ albâ et valdè iridescente.

Hab.—Etowah River, Georgia. Rev. G. White.

UNIO PROTENSUS.—Testâ lœvi, latè ellipticâ, subcompressâ, valdè inæquilaterali, posticè subbiangulatâ, anticè rotundâ; valvulis subtenuibus, anticè aliquantò crassioribus; natibus prominulis; epidermide tenebroso-fuscâ, obsoletè radiatâ; dentibus cardinalibus minimis, obliquis striatisque; lateralibus prælongis subcurvisque; margaritâ vel cœruleo-albâ vel salmoniâ et iridescente.

Hab.—North Carolina. Prof. E. Emmons.

[May,

UNIO PUNCTATUS.—Testâ lævi, ellipticâ, ad latere planulatâ, valdè inæquilaterali, posticè et anticè rotundatâ; valvulis crassis, anticè aliquantò crassioribus; natibus vix prominulis; epidermide olivaceâ; radiis punctatis undique indutis; dentibus cardinalibus parvis, compresso-conicis crenulatisque; lateralibus longis, crassis subcurvisque; margaritâ argenteâ et iridescente.

Hab.—Caney Fork, Tennessee, Dr. Edgar; and Tuscumbia, Alabama, B. Pybas.

UNIO AMABILIS.—Testâ lævi, triangulari, subinflatâ, inæquilaterali, posticè angulatâ, anticè rotundâ, valvulis crassiuseculis, anticè crassioribus; natibus subprominentibus, ad apices undulatis; epidermide vel luteolâ vel fuscenscente, obsoletè radiatâ; dentibus cardinalibus parvis, obliquis corrugatisque; lateralibus sublongis, obliquis corrugatisque; margaritâ vel albâ vel dilutè salmoniâ et valdè iridescente.

Hab.—Butler, Taylor Co., Georgia. H. M. Neisler.

UNIO LYONII.—Testâ lævi, subrotundâ, subcompressâ, inæquilaterali; valvulis subcrassis, anticè crassioribus; natibus prominentibus; epidermide rufo-fuscâ, latè radiatâ; dentibus cardinalibus subgrandibus, subcompressis corrugatisque; lateralibus crassis, obliquis subcurvisque; margaritâ dilutè salmoniâ et valdè iridescente.

Hab.—East Tennessee. Major S. S. Lyon, U. S. E.

UNIO PROPRIUS.—Testâ lævi, oblongâ, subinflatâ, inæquilaterali, posticè obtusè angulatâ, anticè rotundâ; valvulis subtenuibus, anticè crassioribus; natibus prominulis, ad apices undulatis; epidermide luteâ, eradiatâ; dentibus cardinalibus parvis, acuminatis, erectis, compressis; lateralibus sublongis subcurvisque; margaritâ vel purpureâ vel salmonis colore tinctâ et iridescente.

Hab.—Lafayette, Georgia. Rev. G. White.

UNIO CROMWELLII.—Testâ lævi, ellipticâ, subinflatâ, valdè inæquilaterali, posticè rotundatâ, anticè rotundâ; valvulis subtenuibus, anticè crassiuseculis; natibus subprominentibus, ad apices concentricis plicatis; epidermide minutè striatâ, fuscâ vel virenti, radiatâ; dentibus cardinalibus parvis, compressis, corrugatis, in utroque valvulis duplicitibus; lateralibus sublongis subcurvisque; margaritâ purpurescente et valdè iridescente.

Hab.—Kiokee Creek, near Albany, Dougherty Co., Georgia. B. M. Cromwell, M. D.

UNIO MARGINIS.—Testâ ellipticâ, inflatâ, valdè inæquilaterali, posticè et anticè rotundatâ; valvulis crassiuseculis, anticè crassioribus; natibus subprominentibus; epidermide striatâ, fuscâ, marginatâ, obsoletè radiatâ, dentibus cardinalibus parviusculis, valdè crenulatis; lateralibus subcurtis rectisque; margaritâ albâ et valdè iridescente.

Hab.—Blue Springs, Dougherty Co., Georgia. Bishop Elliott.

An Examination of the Birds of the genus **CHRYSONOTRIS**, in the Museum of the Academy of Natural Sciences of Philadelphia.

BY JOHN CASSIN.

Genus **CHRYSONOTRIS**, Boie.

(Genus Chrysomitis, Boie, Isis, 1828, p. 322.)

1. *Chrysomitis.*

1. **CHRYSONOTRIS SPINUS**, (Linnaeus.)

Fringilla spinus, Linn., Syst. Nat., i. p. 181, (1758.)

Pl. Enl. 485. Gould, B. of Eur., pl. 197. Naum., B. of Germ., pl. 125.